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Dipole moments, molar Kerr coefficients, and structures of certain substituted bicyclo[2, 2, 2] octenes and their epoxy derivatives

Arbuzov B., Grozina L., Vereshchagin A.
Kazan Federal University, 420008, Kremlevskaya 18, Kazan, Russia

Abstract

1. Dipole moments and molar Kerr coefficients of a number of substituted bicyclo[2, 2, 2]octenes and their epoxy derivatives were measured. 2. The axes of the ellipsoids of polarizability of the carbon-carbon double bond, the oxide and five-membered anhydride rings were calculated. 3. In the oxidation of bicyclooctenes possessing an endo-oriented methyl group or anhydride ring, exo-oxides are formed, while in the oxidation of endo-cyano-derivatives a mixture of exo- and endo-oxides in a 4:1 ratio is formed. © 1969 Consultants Bureau.

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